

KAEC NOTES

**Spring
2005**

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Essay winners, front row, left to right: Douglas Brian Dawson, Morgan Phillips, Andrea Wallace, Back row, Jacob Kennison, Kyle Mills, Commissioner Richie Farmer, Alye Hamilton and Lauren Woosley



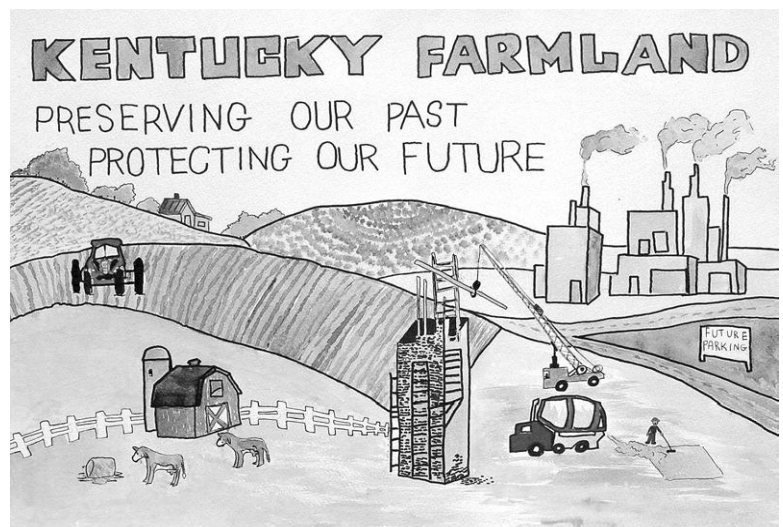
Poster winners, front row, left to right, Caleb Neal, William Thomas, Daniel Yeiser, Shawn Moulis, Allyson Ledford. Back row, Benjamin Harper II, Destry Hawkins, Commissioner Richie Farmer, Shelby Gehlhausen and Joseph Wilson

Kentucky Farmland: Preserving Our Past and Protecting Our Future

Kentucky Farmland: Preserving Our Past and Protecting Our Future was the theme of choice for this year's annual Kentucky Department of Agriculture's poster and essay contest.

Poster and essay winners were selected for each grade 1-8 from over 1,100 entries. However, not a single essay entry was received from a first grader! As usual, the judging was very tough as many great essays and posters were received from talented children all over the state. During a reception held at the Kentucky History Center in Frankfort, winners were awarded a \$100 savings bond and recognized as "Honorary Commissioner's of Agriculture" by Kentucky Commissioner of Agriculture Richie Farmer. After the reception, the winners were given a private tour of the History Center.

The winning entries will be featured on the 2005 Kentucky Agriculture and Environment in Classroom calendar, and other publications. For a complete list of winners and their winning entries, log on to www.kyagr.com.



7th grade winning poster by Benjamin Harper II from Franklin Simpson Middle School, Simpson County.

Need Something New to Excite your Students?

The Kentucky Soybean Board has purchased 4 Soybean Science Kits for your classroom use. Each teacher may use the kit free of charge for two weeks.

The **Soybean Science Kit** program was developed eight years ago at Purdue University through a grant from the Indiana Soybean Board checkoff funds. It is designed to assist teachers in meeting National Science Education Standards, particularly with 4th to 9th grade interdisciplinary curriculum.

The kit is a complete science lab that contains everything necessary for 30 students to participate in 21 hands-on experiments and exercises (with the exception of a very few readily available household materials), including two new Biotech lessons, an interactive CD and an instructional videotape.

The kit is not a toy... it is a serious soybean science tool that is about four times bigger than a bread box and weighs 50 pounds. More than 4,000 kits are currently being used in schools. These kits continue to receive outstanding evaluations from teachers.

The kits are lent out on a first come first serve basis. All you need to do is pay the shipping cost of sending the kit back at the appropriate time. You will be shipped the kit via UPS but you are able to choose the appropriate carrier for your area whether it be UPS, FED EX, or USPS. The charge for UPS at 50lbs (full kit) is approximately 16.50 for ground rate. As you return the kit it should be about this rate or less depending on the distance and weight of the kit. You are more than welcome to compare pricing. UPS has an online calculator that will give you the amount and the delivery date to ensure it's on time. **Remember to be considerate of others and return the kit on time. Other teachers have also made arrangements to use the kit. For each week the kit is returned late there is a \$25 late charge.**

After using the kit, teachers may purchase a kit and accompanying lesson demonstration videotape by calling 317-347-3620. Although the kit was designed for 4th & 5th grade students, it can be adapted for other grade levels.

For more information about the Soybean Science Kit, please contact the Kentucky Soybean Board at 1-800-BEANSOY (232-6769) or www.kysoy.org.

Due to popular demand, these kits are booked up through the end of this school year. So don't delay, reserve your kit now for next year!

Lessons included in the Soybean Science Kit are:

Polymer Lessons

- Chains in the Classroom
- Germinating and Growing Soybeans
- Polymers in Your Life
- "It Does What???" - Oobleck
- Links in the Classroom
- What's in a Soybean?
- Chromatography Using Soybean Leaves

Oil Lessons

- Marbleizing
- Salad Dressing
- Lip Balm (great fundriaser)
- Hand Cream
- Oil and Water Emulsion
- Candles & Crayons
- Putt-Putt Boats

Biotechnology

- DNA Modeling
- DNA Extraction

Interactive CD-ROM

- Growing
- Processing
- Products

Agriculture Adventures: Kentucky

This program begins with an exciting 45-minute assembly to introduce the topic of agriculture to the entire school. Students will be delighted during the “Lunch Room Live” assembly, where COSI’s facilitator, Chef Parmesan, makes a “pizza” using soil as the first ingredient. Students travel from the farm to the dinner table while learning about field preparation, photosynthesis, processing wheat, and making cheese – essential steps for any pizza.

After the assembly, the learning continues as students conduct hands-on experiments. Chef Parmesan and 12-15 adult volunteers (provided by the host school) guide the students through a series of experiments and experiences that build upon the information presented in the assembly. Students can milk a “cow” with an actual milking machine, grind wheat into flour while learning about simple machines, test soil samples for pH and then decide what crops would be good to plant in that soil, plus much more.

Agriculture Adventures: Kentucky will be available to schools throughout Kentucky starting August 2005. The cost of the daylong program is \$875. COSI on Wheels can accommodate 480 students per school day. For a school to participate in the program, prior access is needed to the gymnasium/cafeteria to set-up eight 8-foot tables. Also 12-15 adult volunteers are needed for the duration of the school day to help with the learning stations.

To reserve Agriculture Adventures: Kentucky call 1-888-819-2674 ext. 1703 or visit www.cosi.org, to submit a reservation online. Due to the outstanding response to these programs, all requests are tentative until confirmed by COSI in writing on your deposit invoice. A nonrefundable deposit of \$200 per day is due by September 1, 2005 after you have received your invoice. Program balance is due no later than two months before your program date. COSI is a non-profit organization.

COSI’s AGRICULTURE ADVENTURES – KENTUCKY is presented by COSI on Wheels, with the assistance and sponsorship of Kentucky Agriculture and Environment in the Classroom, Inc., the Kentucky Cattlemen’s Association, the Kentucky Pork Producers Association, and the West Kentucky Grower Co-op.

Alignment to the Kentucky Core Content for Science Assessment

Conceptual Understandings: Physical Science

- Properties of Objects and Materials, SC-E-1.1.1

Conceptual Understandings: Earth and Space Science

- Properties of Earth Materials – SC-E-2.1.1, SC-E-2.1.2
- Objects in the Sky – SC-E-2.2.1



- Structure of the Earth System: Lithosphere, Hydrosphere, Atmosphere – SC-M-2.1.4

Conceptual Understanding: Life Science

- The Characteristics of Organisms – SC-E-3.1.2
- Life Cycles of Organisms – SC-E-3.2.1
- Organisms and Their Environments – SC-E-3.3.1
- Populations and Ecosystems – SC-M-3.5.4

Visit www.cosi.org to see how this program relates to other core content.

What Earth Day means to agriculture.

Environmentalism is an issue that has become a top priority in the U.S. and around the world in the 21st century. It seems that the planet is collectively becoming aware of the damage that has been caused to the Earth by irresponsible behavior. Issues like global warming, air pollution, greenhouse emissions, toxic waste, depletion of natural resources and the disappearing ozone layer have served as warning signs that we must change our ways to sustain our planet.

Ironically, the agriculture industry is the one group whose livelihood depends on the environment. Throughout history, farmers and ranchers have relied on the land to produce the food necessary to sustain Earth's growing population. Perhaps no other industry in the world has more invested in Earth's resources than farmers and ranchers. These people have devoted their lives to understanding nature's delicate balance and working with the Earth.

Not only is the environment a farmer's lifeblood, it also represents his or her family's future. According to a recent poll by the American Farm Bureau Federation, 97.2% of young farmers plan to farm for life and nearly all of them hope their children will follow in their footsteps. Keeping the farm in the family provides some strong incentive for today's food producers to protect and preserve the natural resources of their land.

If you take a close look at the agricultural community you will see a group that is dedicated to protecting the environment.

As the global population increases, food producers are developing new agricultural techniques which allow us to grow more food on less land. These techniques are also offering measurable environmental benefits that conserve soil, protect drinking water, reduce chemical use and protect wildlife, all while allowing farmers to increase their yields to feed a growing population

You may not see or hear from many farmers and ranchers during Earth Day's festivities. Unlike the majority of people who celebrate Earth Day, these folks do not limit their commemoration of the Earth to one day a year. Celebrating and preserving the Earth and its bounties are an every day event for the nation's food and fiber producers.

Today's farmers and ranchers are truly stewards of the land and they demonstrate this by adopting more environmentally sound methods of farming that reduce the risks involved with planting and harvesting the world's food and fiber.

PRESERVING OUR FUTURE

Agricultural environmental efforts are producing tangible results. As the industry evolves with new technology and better farming methods, the benefits to the environment are becoming evident. Today, many agricultural organizations and companies are offering incentive programs that challenge farmers to show their dedication to the Earth. This has resulted in a steady increase in sustainable farming practices and measurable benefits to the environment:

1. **Farmers enrolled 34.6 million acres of their land in the Conservation Reserve Program** to protect the environment and provide habitat for wildlife as of February 2004.
2. Under the United States Department of Agriculture initiatives, **farmers and ranchers have installed 1.54 million miles of conservation buffers by 2003.**
3. Conservation tillage practices have increased steadily. **In 2002 103.1 million acres farmed was tilled using some form of conservation tillage.**
4. A generation ago, 40 tons per-acre of topsoil were lost to erosion. Today, only 3 tons per-acre of topsoil is lost. This translates to a **90% reduction in soil erosion**
5. Farmers and ranchers are currently **providing food and habitat for 75% of the nation's wildlife**
6. Today's farmer feeds 144 people as compared to 25 people in 1960.

EARTH FRIENDLY AGRICULTURE

- Agriculture has more invested in Earth's resources than any other industry in the world.
- New technology allows farmers to conserve the soil, protect water, reduce chemical use and protect wildlife.
- Agriculture commemorates the Earth and its resources every day of the year.

"A Farmer's Environmental Creed"

As a producer of food and fiber I pledge to:

- **Conserve and improve our soil resources, leaving the land I farm in productive and good health for the benefit of future generations.**
- **Protect the quality and supply of our water resources, always mindful of those who live down stream.**
- **Respect the diversity of nature and recognize my responsibility to provide habitat for animals and native plants whenever possible.**
- **Responsibly use fertilizers, crop protection and animal health products, never using more than needed and always applying with care.**
- **Help others in my community to protect natural resources on their own farms.**

Excerpt from CropLife Ambassador Network PowerPoint presentation "Environmental Stewardship and Agriculture" found at <http://ambassador.maca.org>.



Have an "Ag in the Classroom" story?

If you have a story about how you use *Project Food, Land & People* lessons in your classroom, we'd love to hear about it. It could be a great inspiration to other teachers to see how you conduct a particular activity and they might try it themselves. Call or e-mail your story and we'll take care of writing the story and even taking pictures. Your story might be included in this newsletter, our department quarterly newspaper *Kentucky Agriculture News*, and on our Web site. We'd love to hear from you! Contact Rayetta Boone by e-mail at rayetta.boone@ky.gov or Teresa Prather at teresa.prather@ky.gov or you can reach either by phone at (502) 564-4696.



The National Science Digital Library (NSDL), a National Science Foundation (NSF) Web site, offers free science-related resources, including text, graphics, interactive video, links, and other resources pertinent to computing, engineering, global mapping, physics, mathematics, earth science, paleontology, and more. Find out more at <http://nsdl.org>.

School and Community Organizations Invited to Apply for Garden Teaching Grants

Through the Healthy Sprouts Award program, the National Gardening Association <http://www.garden.org/home> and Gardener's Supply Company <http://www.gardeners.com/> have partnered to support schools and community organizations that use gardens to teach about nutrition and explore the issue of hunger in the United States.

Each of twenty-five selected programs will receive an award package of seeds, tools, garden products, and educational resources for growing a vegetable garden. Five of these programs will also receive \$500 in cash and a \$200 gift certificate to the Gardener's Supply Company catalog. The selection of winners is based on the demonstrated relationship between the garden and nutrition education and hunger awareness. At least 10 percent of the food produced from the program should be donated.

Visit the National Gardening Association Web site to download an application form.

The New York Times Learning Network

The New York Times Learning Network is a free service for students in grades 3-12, their teachers and parents. The site is updated Monday through Friday throughout the year. Visit www.nytimes.com/learning

BrainPOP

BrainPOP is a web site that features hundreds of educational topics covering English, Math, Science, Social Studies, Health, and Technology, all correlated to National Education Standards for Grades 5-8. That just means that it's stuff that kids will have to know. Well, some of it's just for fun. But most of it is both educational AND fun. Check it out at www.brainpop.com

Worksheet Generator

Now you can create customized worksheets in less than 5 minutes! Choose from several vocabulary and math worksheet templates in the "Create a Worksheet". Or just use a teacher-created worksheet in the library of "Worksheets to Go"! To learn more go to: <http://school.discovery.com/teachingtools/worksheetgenerator/>

All Wild About Kentucky's Environment: Energy Workshop - July 5-7, 2005 at East Kentucky Power in Winchester, KY

A traveling energy workshop for all educators where participants will learn about energy through hands-on experiences. All workshop traveling expenses will be paid by a grant. For more information log on to: www.kentuckyawake.org or contact Carol Hanley at chanley@uky.edu or (859) 333-8248

2005 Critical Technologies Research Symposium - July 12- 14, 2005.

Opportunity for K-12 educators to work directly with research scientists giving hands-on experiences with the technologies that will fuel tomorrow's economy. Registrations and \$150 fee due June 10. For more information, contact Stephanie Jenkins at (859) 257-1299 or email at swjenk2@uky.edu.

April 25 – May 1 – TV-Turnoff Week. For fun activities try: <http://www.tvturnoff.org/index.htm> *

April is Soyfoods Month. Learn about Kentucky soybeans and its many uses at www.kysoy.org *

“There is no greater joy nor greater reward than to make a fundamental difference in someone’s life.”

Sister Mary Rose McGeady



*Don't
Forget!*

MARK YOUR CALENDAR

APRIL

22 Earth Day

MAY

18-19 State Envirothon Competition
Jabez, KY

JUNE

3-5 and 10-12 KAEC Workshop
Murray State University

8-11 National Agriculture in the
Classroom Conference,
Indianapolis, IN

28-29 Farm Bureau's "Partners
for Agriculture Literacy"
Education Conference
Louisville, KY

Did you know?

**Kentucky was the site of the
first commercial vineyard in
the United States.**

JULY

11-12 KAEC Workshop
Elizabethtown

26 KAEC Workshop
Galt House, Louisville

AUGUST

16 KAEC Workshop
Murray State University

18-28 Kentucky State Fair

30 Agriculture Adventures: Kentucky
beginning school visits!

SEPTEMBER

9 KAEC Workshop
Western Kentucky University

9-10 KAEE Conference
Prestonsburg

16-17 KAEC Workshop
Somerset

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